

United States Army *Logistics Transformation Agency*



CLOE & Aviation

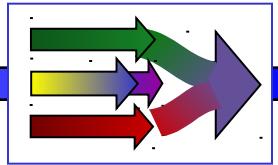
An Information Briefing for

Aviation PMs

23 October 2003

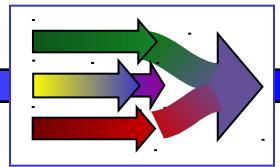
Logistics Management
Institute (LMI)
(858) 756-8875

Materiel Logistics Division
Logistics Transformation
Agency
(717) 770-7600

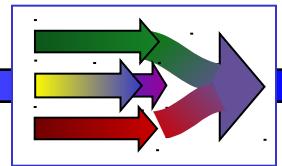


Purposes of the Meeting

- To Tell You About CLOE
- To Learn About Aviation
- To Identify The Major Logistics Transformation Initiatives That Apply To CLOE & Aviation
- To Join Together To Map A Strategy For A Common Operational Architecture For Army Tactical Maintenance

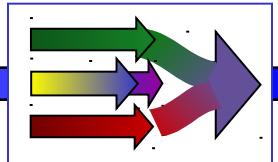


CLOE OVERVIEW



What is CLOE?

- CLOE is the G4's Program for addressing the synchronization and integration of sustainment doctrine & technology.
- CLOE is the Army's approved overarching concept for interoperability of enablers in Logistics Transformation
- The operational architecture at any point in time that enables sustainment interoperability of a mixture of force elements on the battlefield



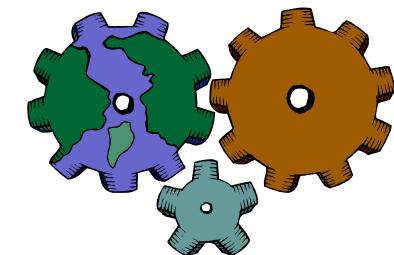
CLOE Purpose

The Purpose Of CLOE Is To Ensure Sustainment Interoperability Among Self Reporting, Self-Diagnosing Platforms And The Future Force Sustainment System Network To Provide The Highest Possible State Of

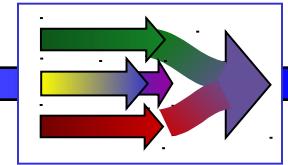
Operational Availability

Mission Capability

Combat Power

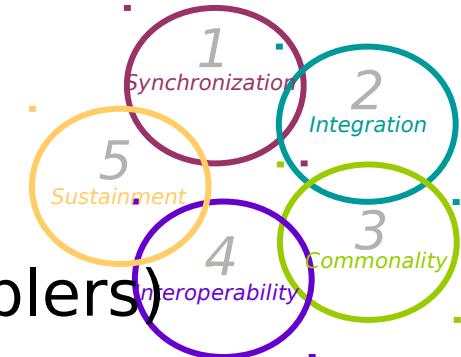


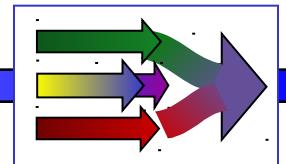
While Reducing The Logistics Footprint



CLOE SCOPE

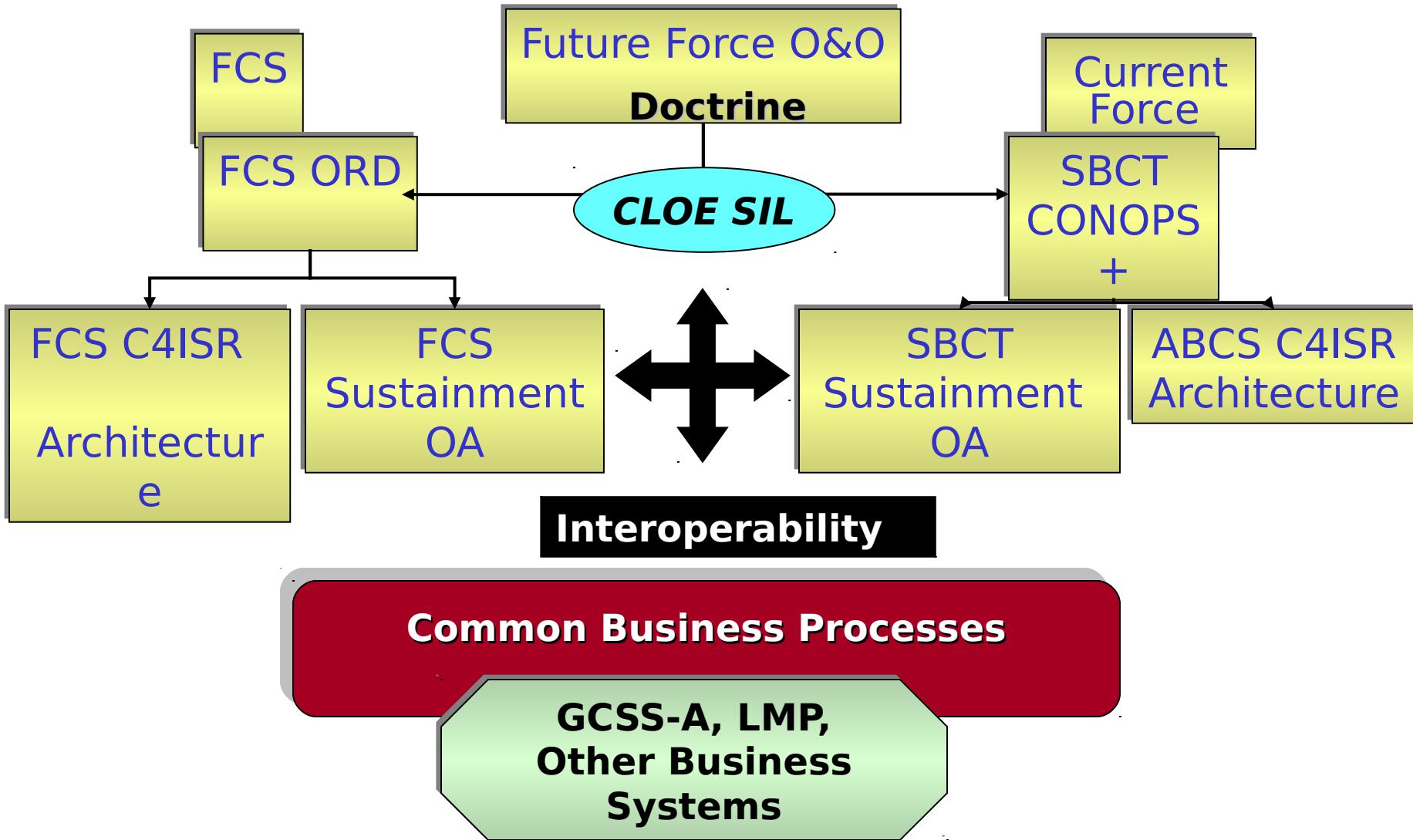
1. Synchronization of Evolving
 - *Doctrine & Technology*
 - *Business Processes*
2. Integration of Technology (Enablers)
 - *Across Commodities*
 - *Platform, Comms, Log*
3. Commonality
 - *Standards, Specifications & Protocols*
 - *Data Management*
 - *Configuration Management through a CCB Process*
4. Interoperability
 - *Current & Future Forces*
 - *Networked Sustainment Environment*
5. Sustainment
 - *PM Support - Life Cycle Management*

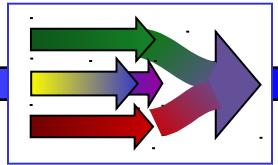




CLOE SCOPE

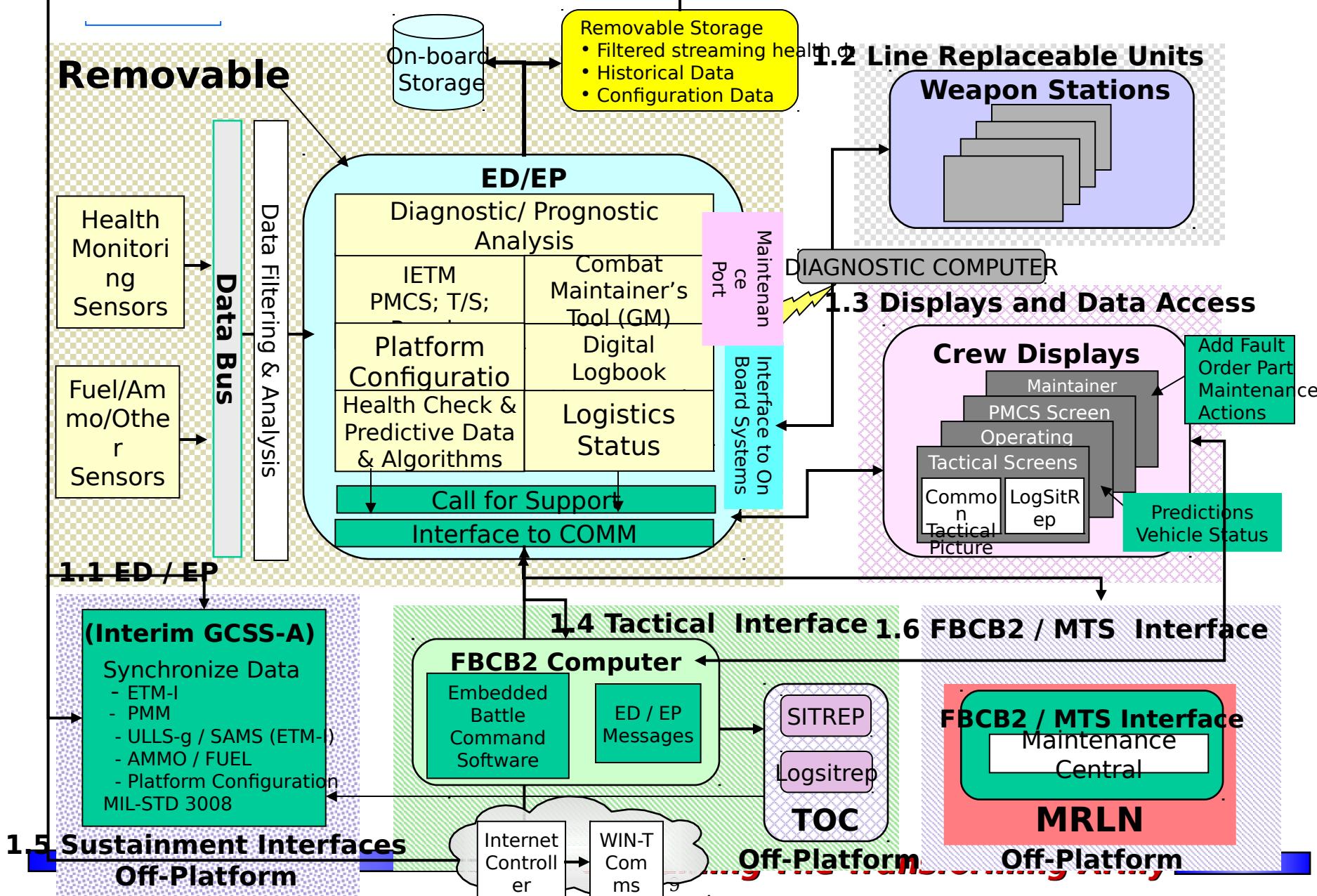
Synchronizing & Integrating Sustainment Doctrine & Technology

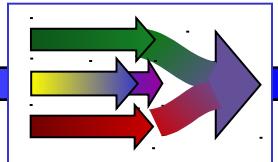




CLOE ARCHITECTURE

CLOE Enablers Demonstration - The Stryker Experiment Architecture

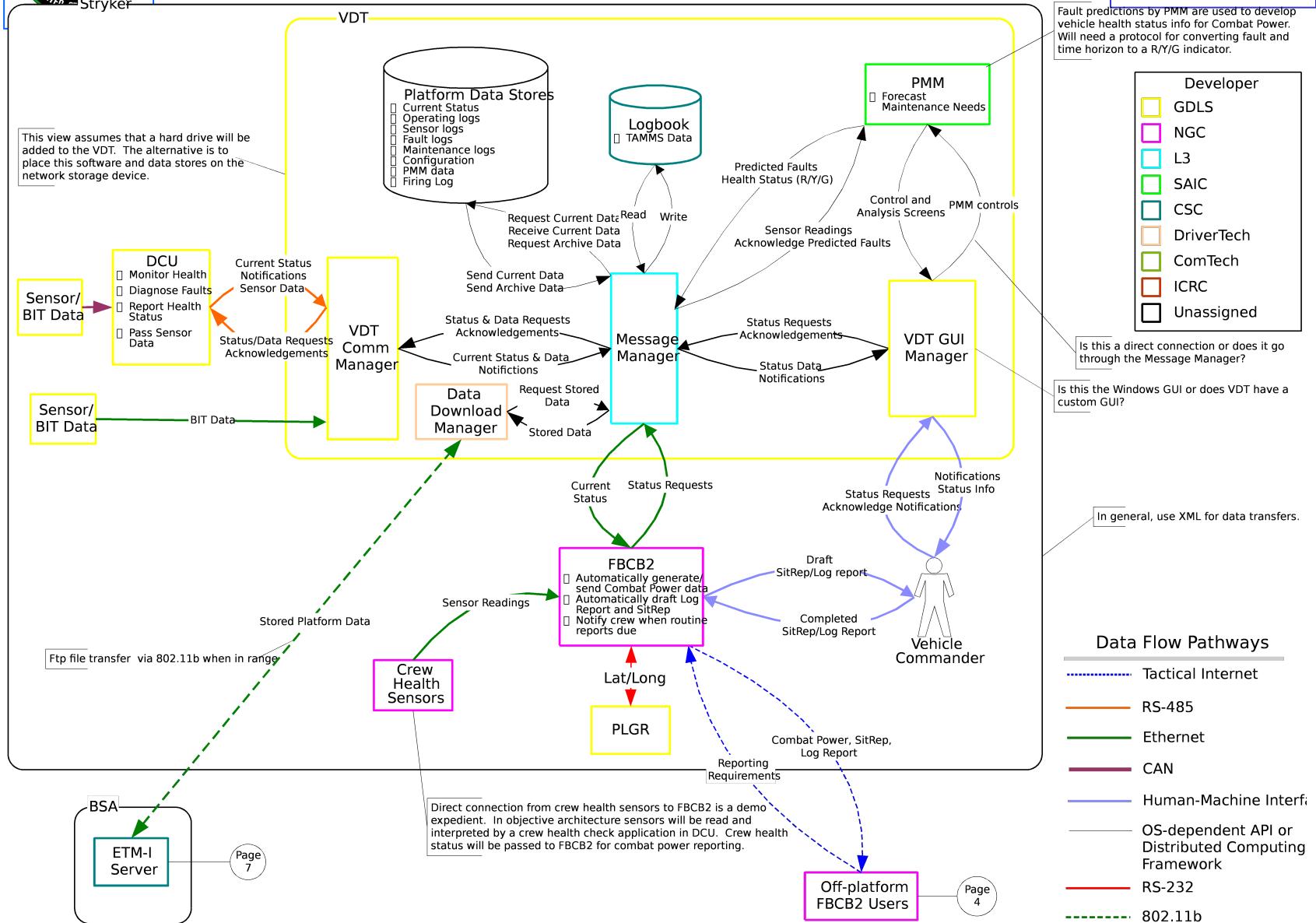


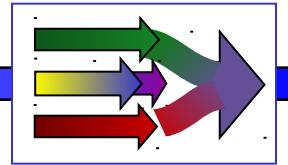


CLOE INFORMATION FLOWS



Operational Status Reporting Data Flows on Stryker





CLOE Architecture Versions

The CLOE Program Starts With the SBCT PoE Operational Architecture and Adds Increasing Scope Until It Encompasses All Army Commodity Areas

**CLOE Ground, Soldier, &
GCSS-A OA, (w/FC)**

CLOE Operational Architecture, 3.0
Aviation & GCSS-A/T

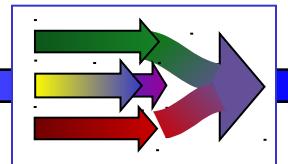
**CLOE Ground & Soldier
(w/FC)**

CLOE Operational Architecture, 2.0
ICS3 & Soldier Systems

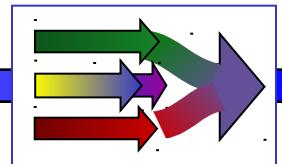
**CLOE Ground
(SBCT & Cur-
STAN)**

CLOE Operational Architecture, 1.0

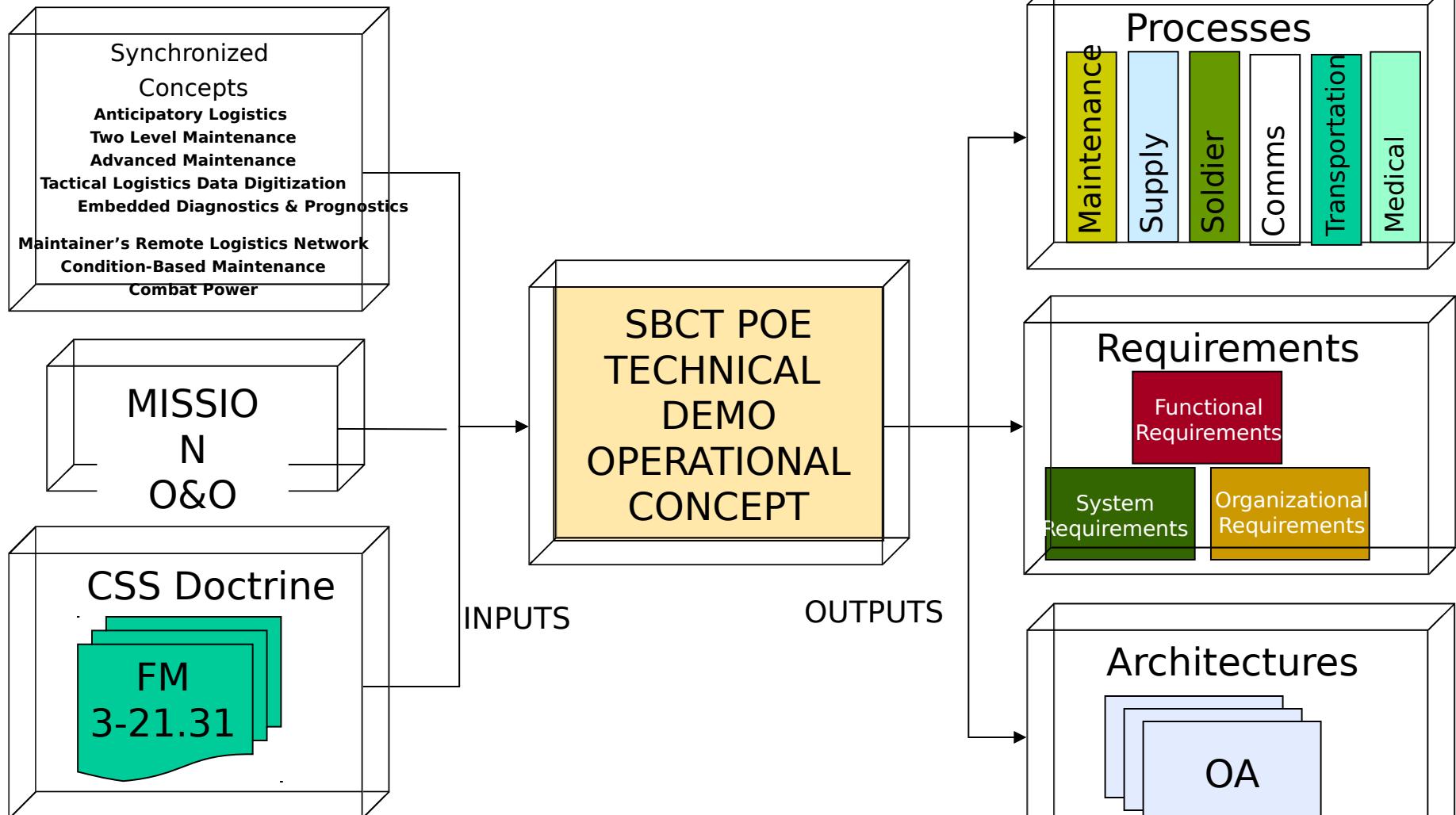
SBCT OA

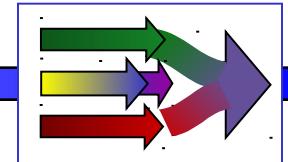


CLOE
and the
SBCT Proof of Enablers
Operational Architecture
with a
Technical Demonstration

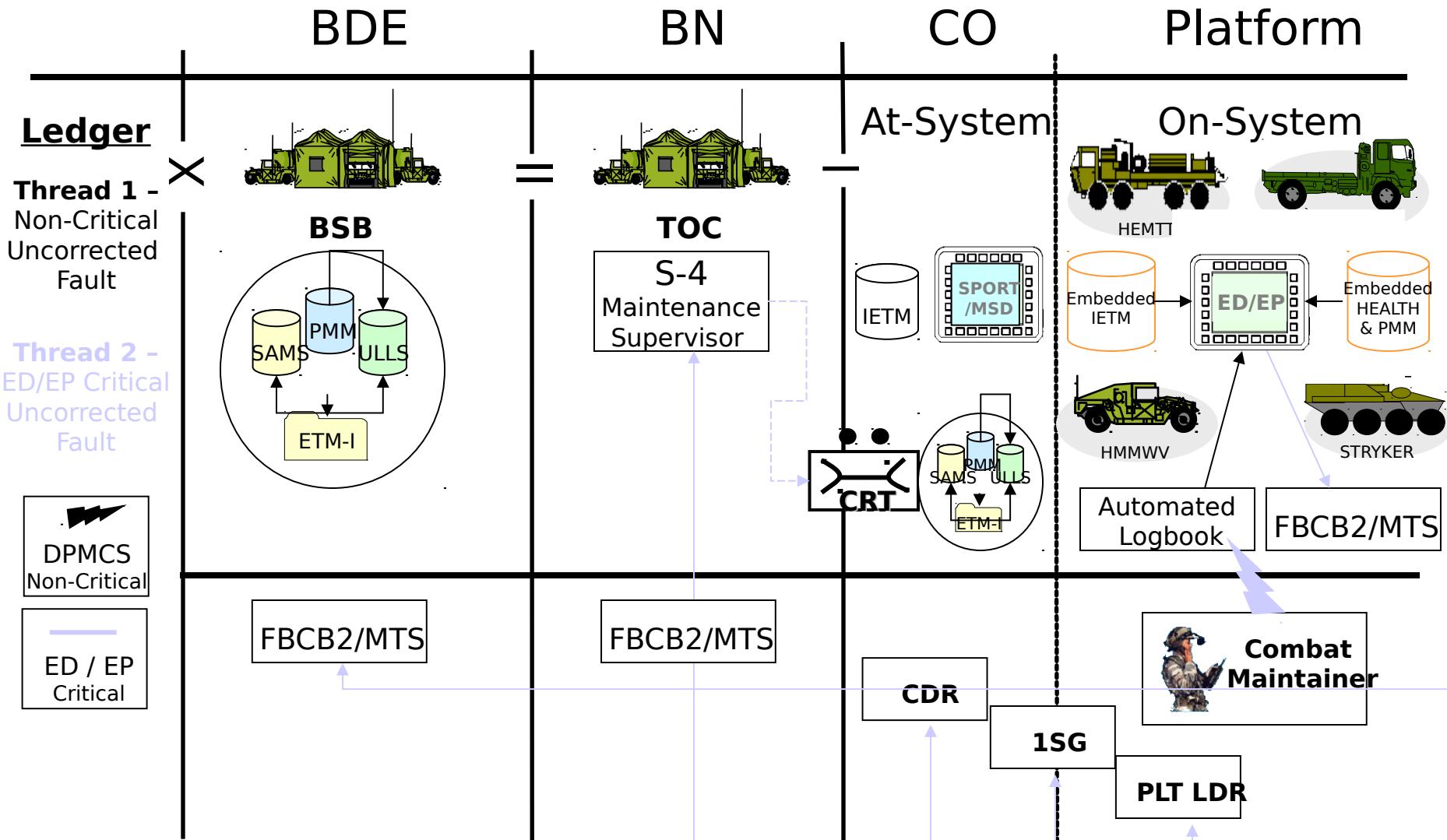


Synchronization Model, Applied to SBCT





Project Scope - ED/EP Critical Data Flow

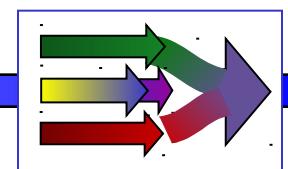


Source: FM 4-93.7, 6/24/02 Draft

TLDD CONOPS draft v 3.0

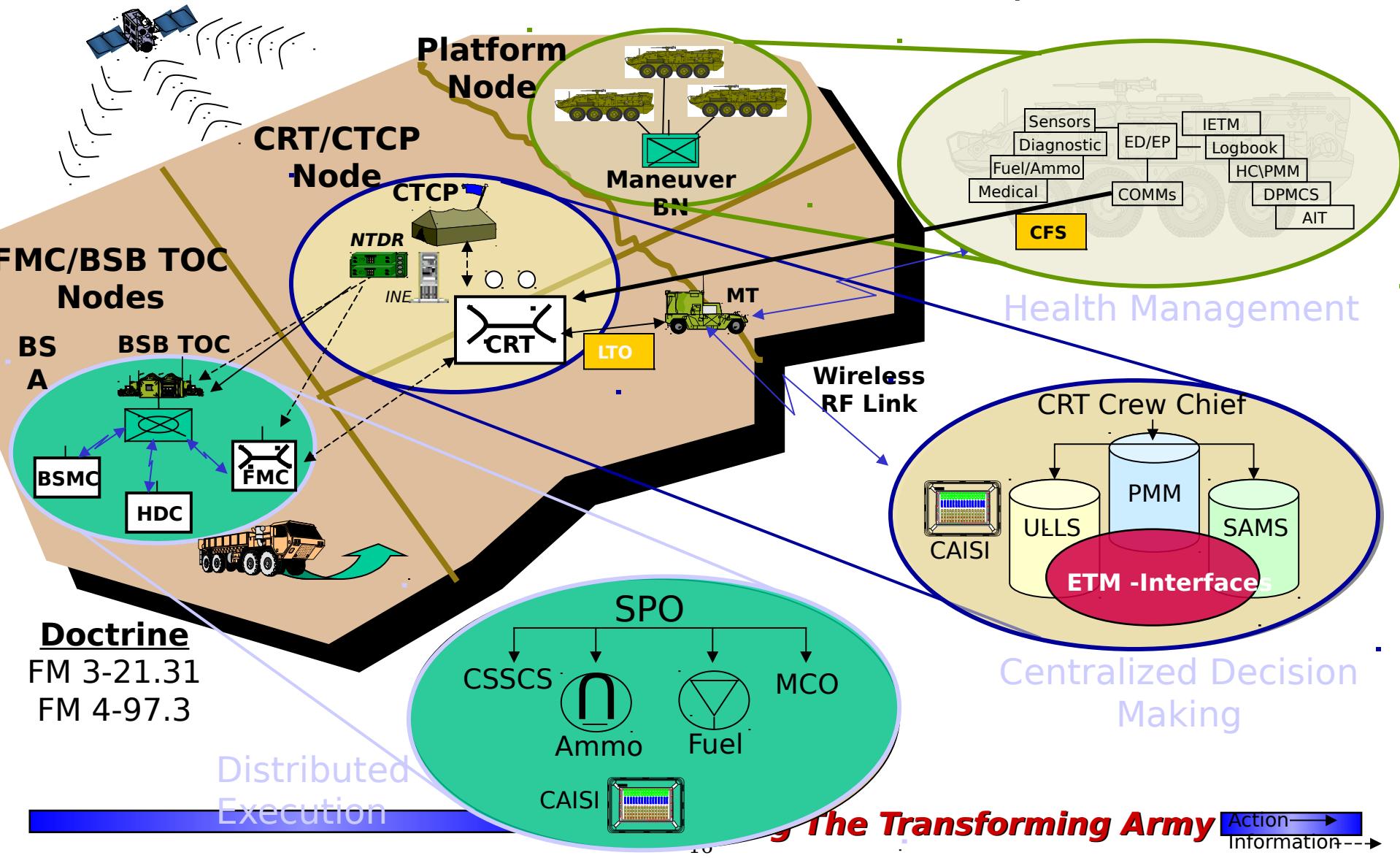
TRADOC/Fort Knox draft Advanced Maintenance Concept

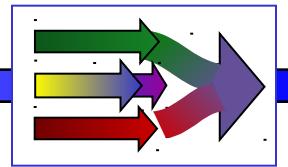
Sustaining The Transforming Army



Demo Operational Architecture

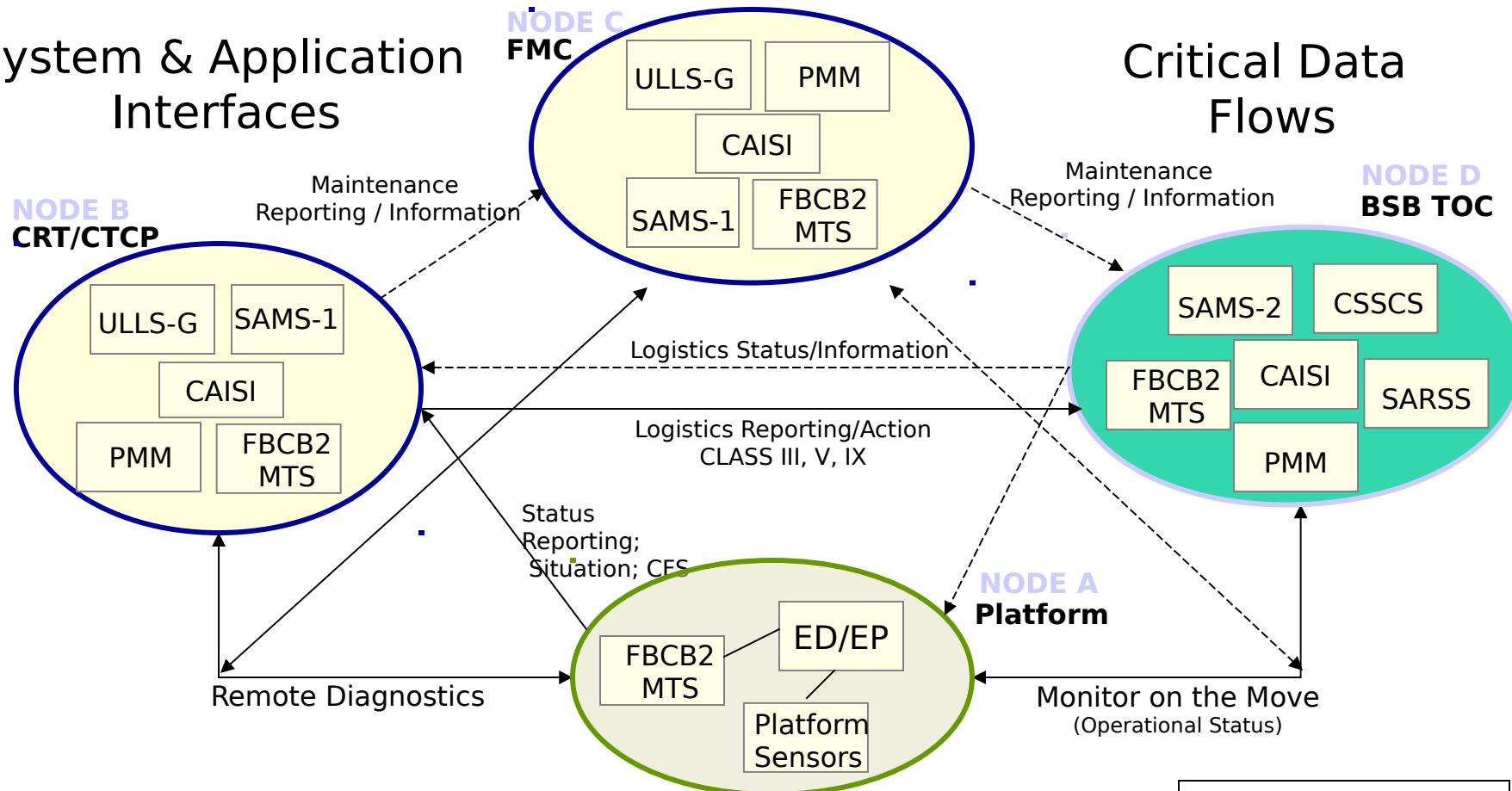
The Foundation CLOE Builds Upon

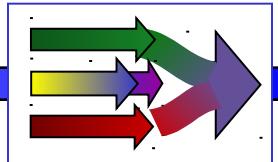




Demo System Architecture (SA)

System & Application Interfaces

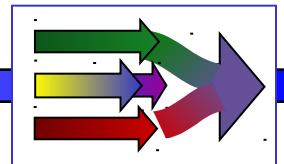




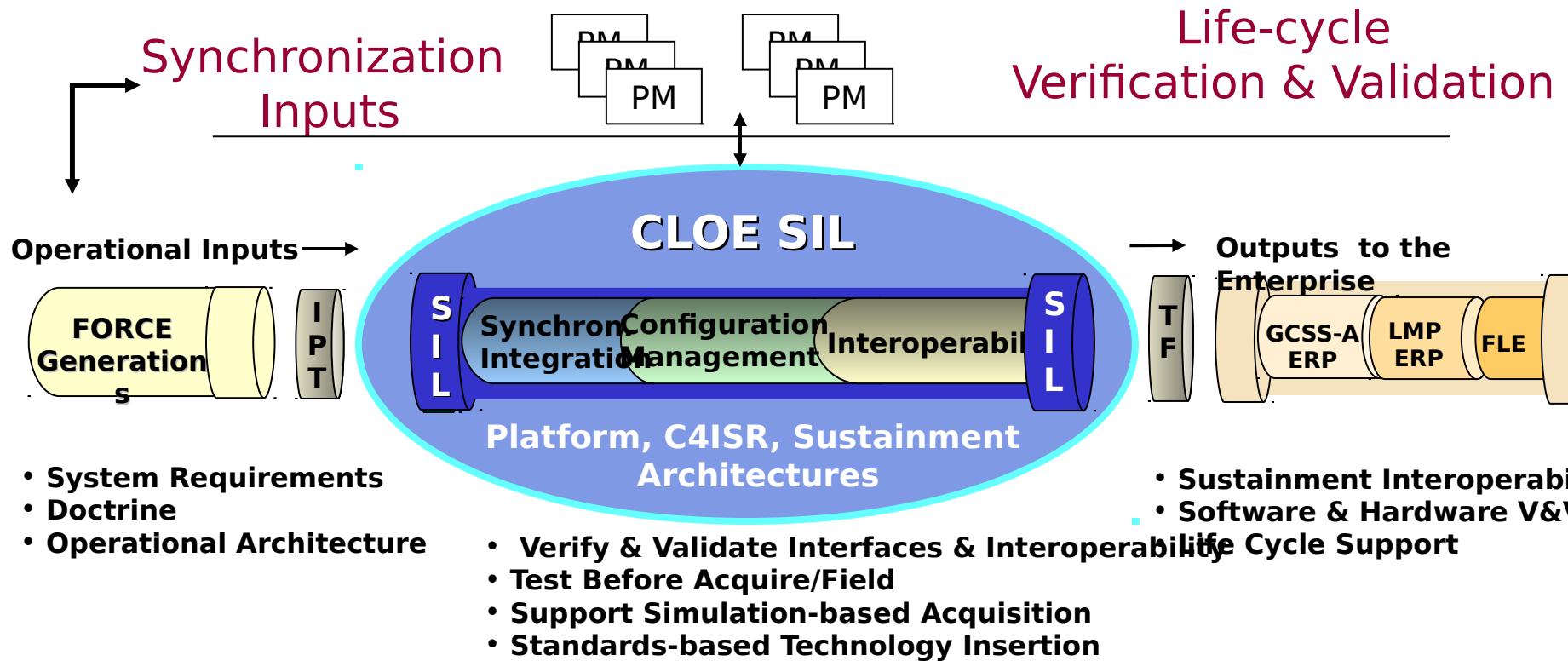
The CLOE Systems Integration Laboratory (SIL)

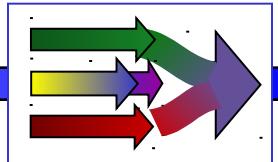


CLOE Systems Integration Lab



The CLOE SIL Operates as a Meta-Laboratory, Ensuring Interoperability Across All Equipment Force Generations





The CLOE SIL

Levels of Operation

LIFE-CYCLE

\$

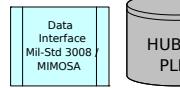
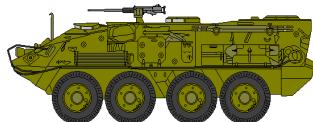
Life-Cycle Costs (LCC) & Cost Trades

BUSINESS PROCESS

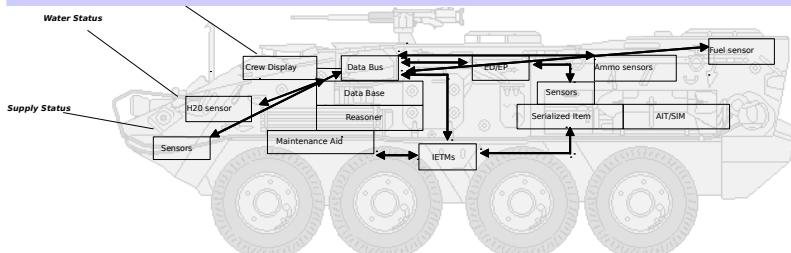
Brigade / UA Battlefield Doctrine

Business Processes

Bde & Below



TECHNOLOGY



Benefits to the PM

System Life-cycle:

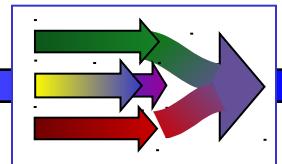
- Test Proposed Hardware & Software
 - Impact Of Tech Trades On LCC
- Provide Input to POM

Business Process:

- Ensure Business Process & Doctrine Compatibility for Tactical Maintenance On the Future Force Battlefield
- Ensure Platform Systems Interoperate Across PEO Domains
 - e.g. C3, EIS, Aviation, Ground

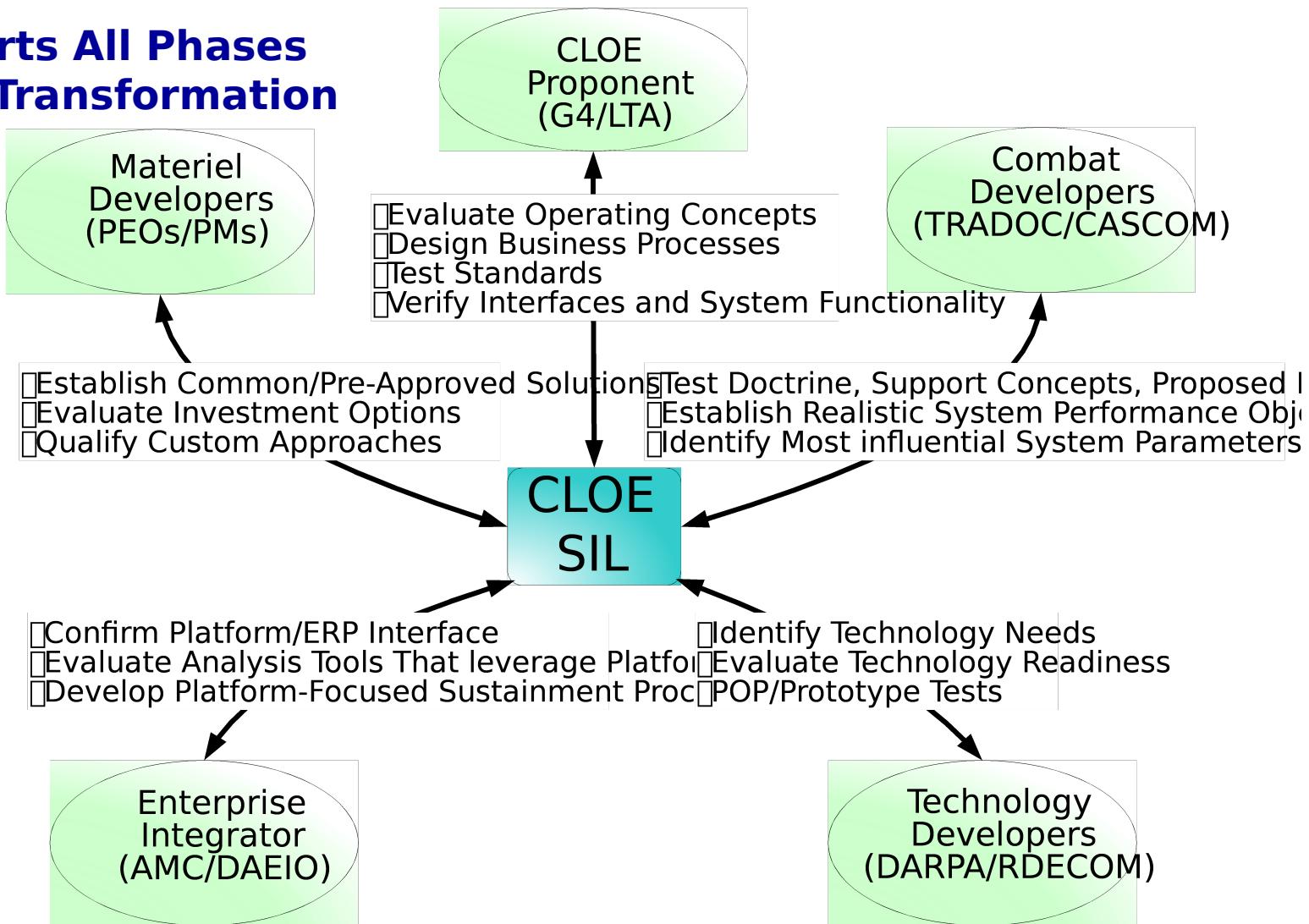
Technology:

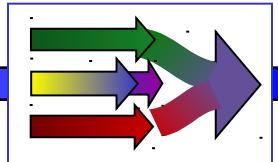
- Identify Platform Data To The Logistics Enterprise
- Recommend Standards, Specs, and Technology Solutions To PMs



CLOE SIL Operation

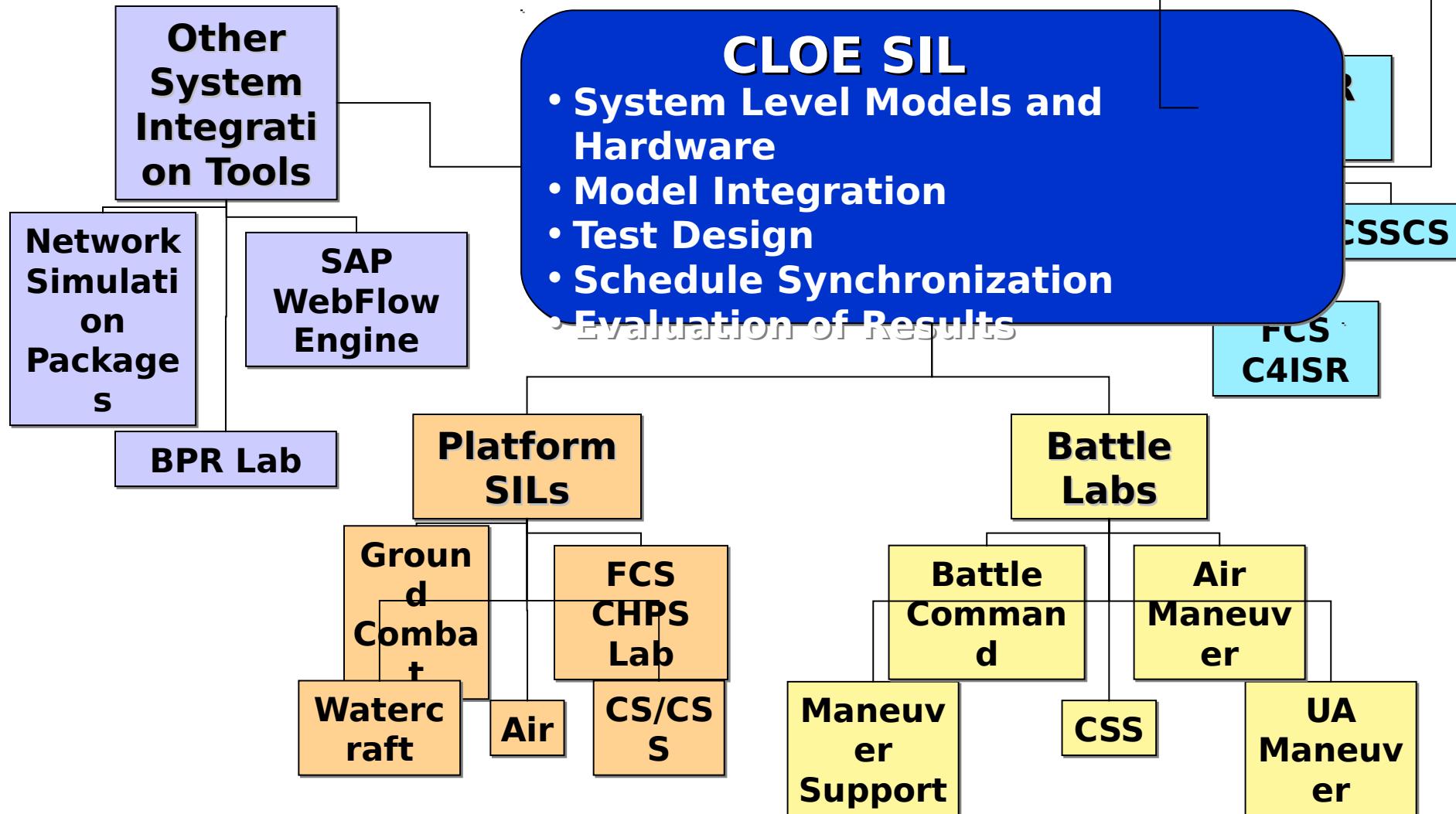
Supports All Phases of Log Transformation

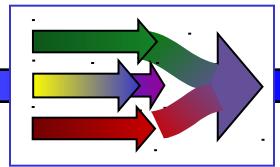




CLOE SIL Collaboration

Distributed Logistics Analysis and Testing Environment

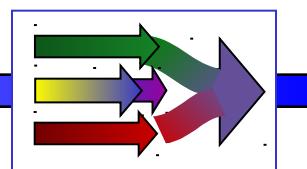




CLOE and Enterprise Integration

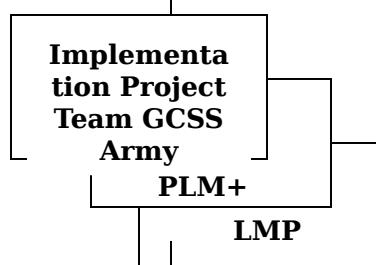


CLOE Complements & Strengthens Logistics Enterprise Integration Processes



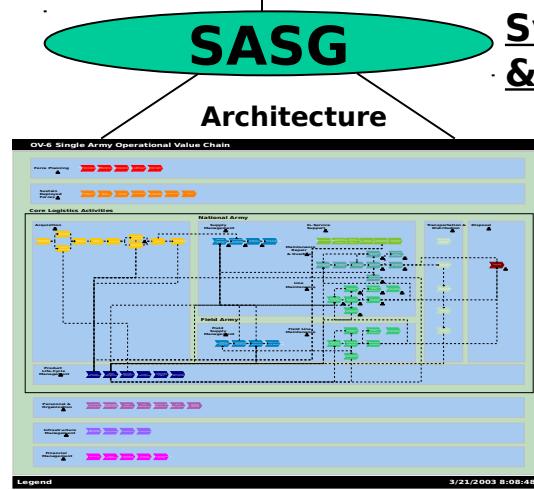
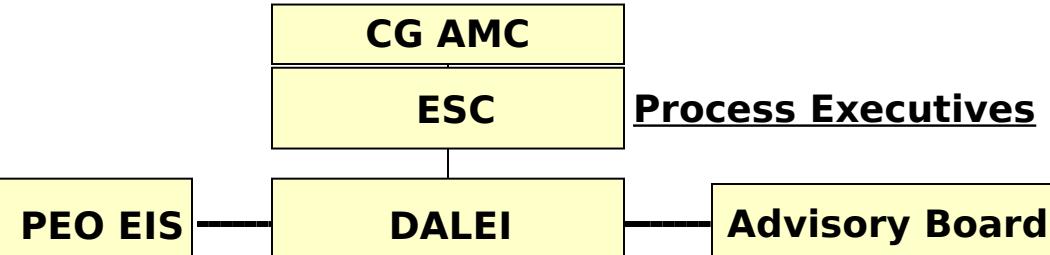
Supports current Legacy and ERP

Long term - exists to work requirements and configuration management



Business Team Leads (Functional)

Implementation/Best Business Practice Consultants



Synchronization & Integration

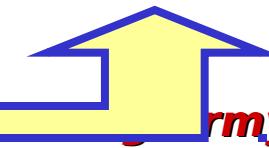
Business Area Leads LAISO/CASCOM

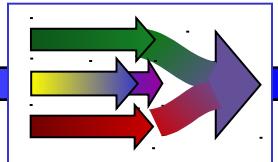
- Requirements Oversight
- Data Management
- Integration Opportunity Prioritization
- Policy Change Assessment

Subject Matter Experts

Cloe

- Focal Point For Requirements In The CBM Domain
- G-4/LTA Joins Membership In SASG





CLOE Reinforces the SASG Functions

- 1. Identify and Map External and Other Army Architectures**
- 2. Ensure the Architecture supports Transformation, Joint Forces, and Combatant Command Requirements**
- 3. Establish and Maintain Standards**
 - Business Process**
 - Master Data**
- 4. Monitor implementation progress against the architecture**

Tools

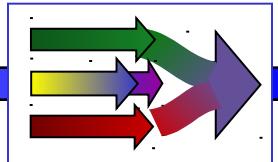
- ARIS tool: Modeling tool to manage Architectures
- Solution Manager: SAP Business Process Implementation method used by projects
- Monthly Project IPRs
- Right Network of Functional Experts

- CLOE Operational Architecture Encompasses 1 & 2 Above
- CLOE is Looking Ahead to FCS Interoperability with LDSS and PS-MRS
- CLOE Has Identified Standards and Protocols for CBM

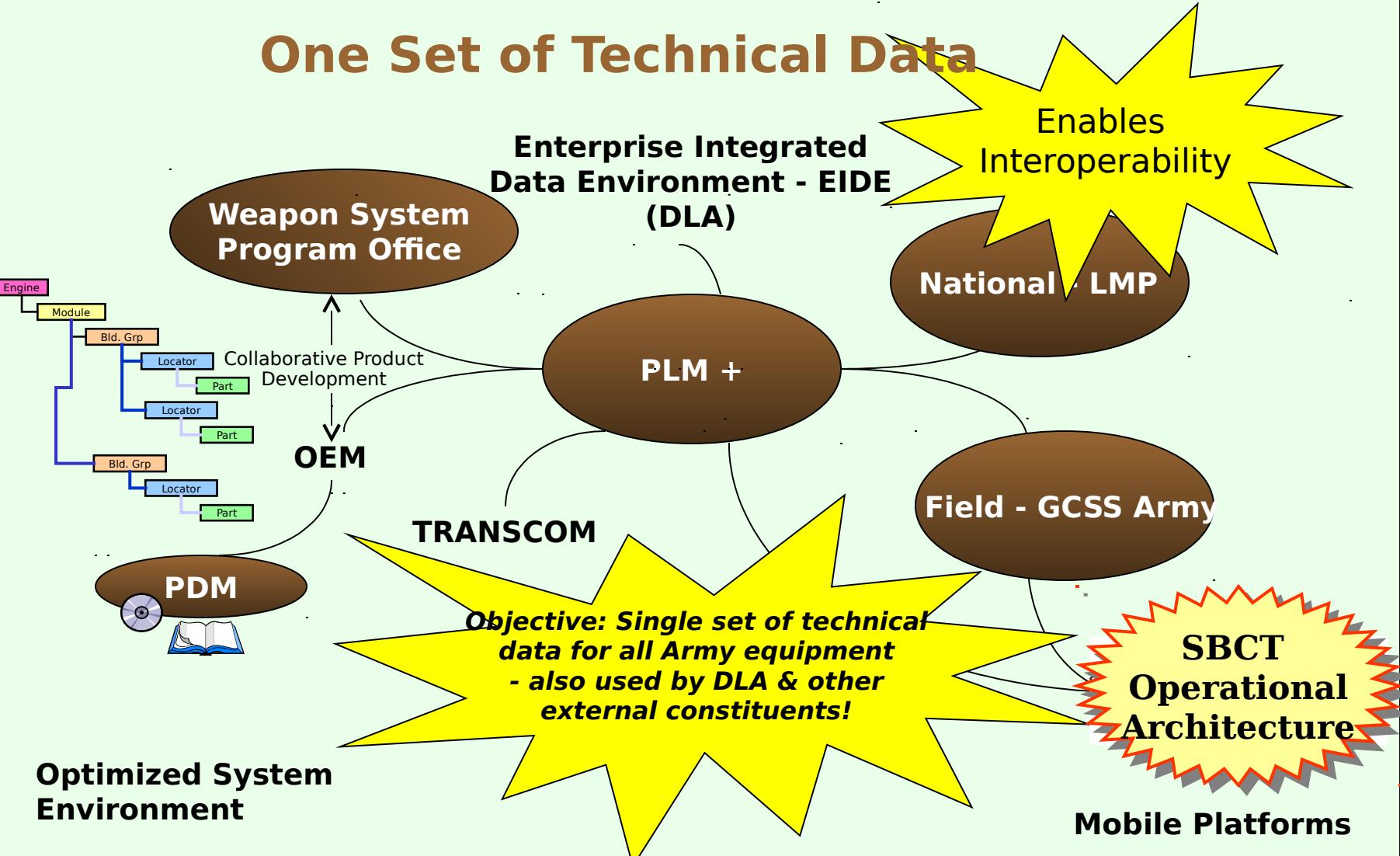
- CLOE Staff Are Participating in The SAP Solution Manager Mapping For Field Maintenance
- CLOE Has A Network of CBM Functional Experts
- CLOE Can Help Identify The Way Ahead



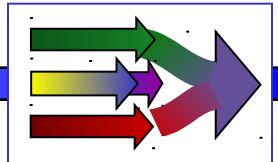
Platform-To-Hub Technical Data Integration



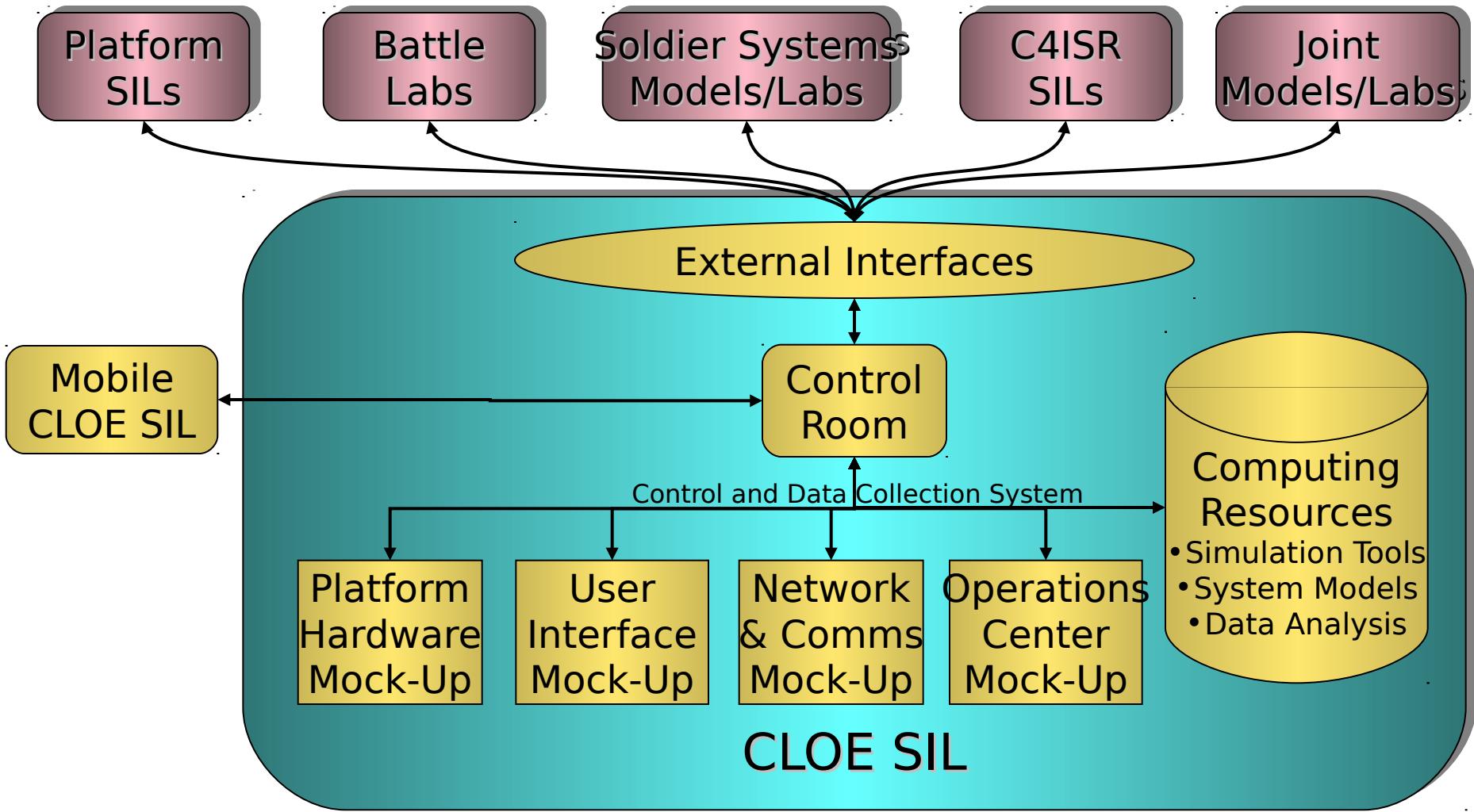
One Set of Technical Data

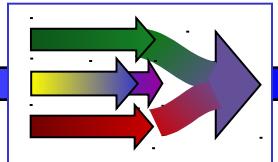


Optimized System Environment



The CLOE SIL Strengthens SASG



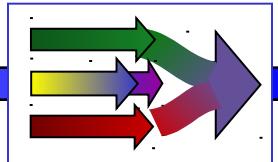


*CLOE,
GCSS-A & SALE*

*(Single Army Logistics
Enterprise)*



CLOE and SALE

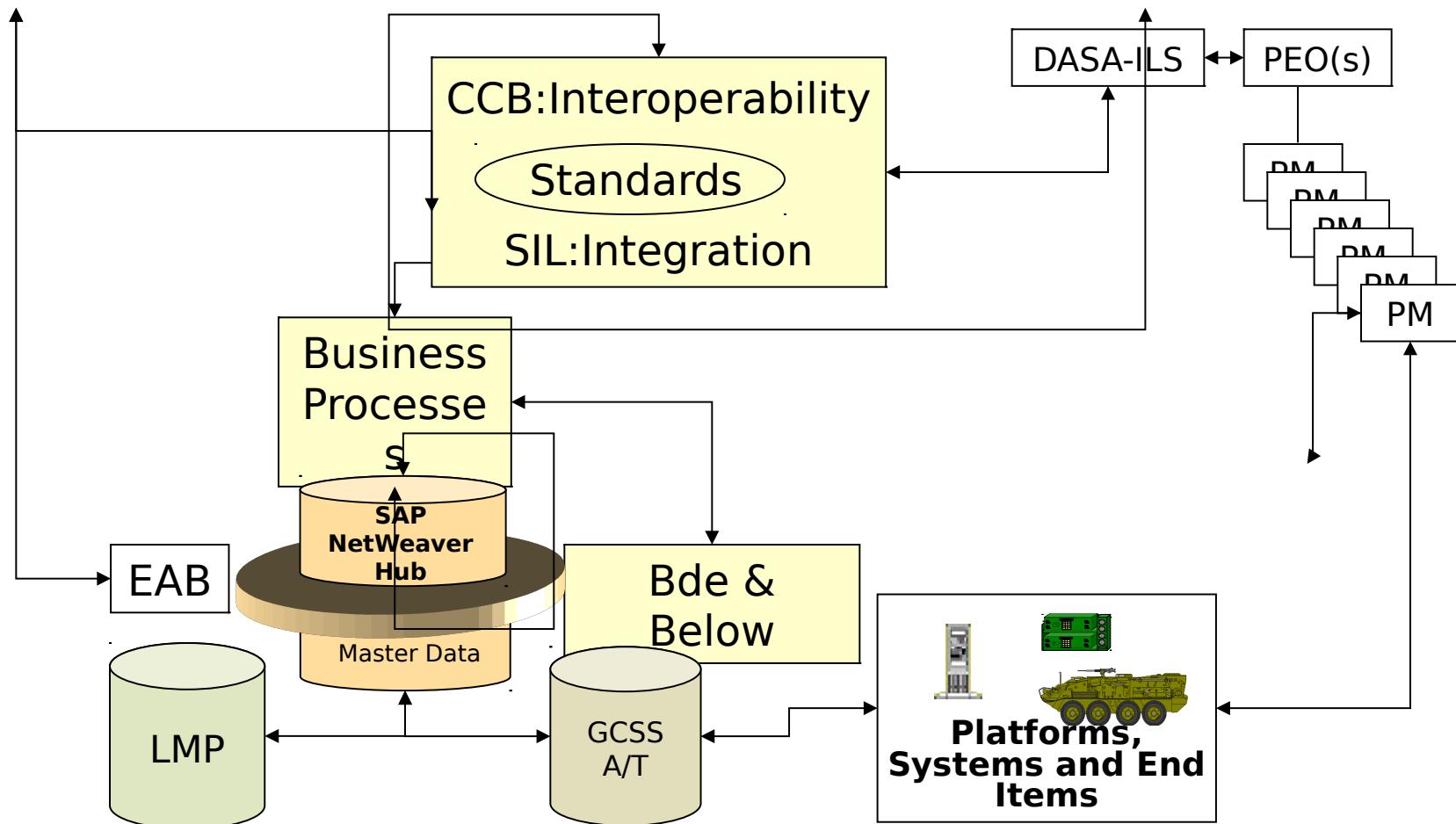


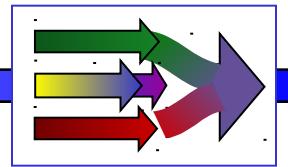
AMC

**Enterprise
Integration**

G-4/ASA(ALT)

**Policy Oversight/
Implementation**





Synchronizing Sustainment Doctrine & Technology via SALE

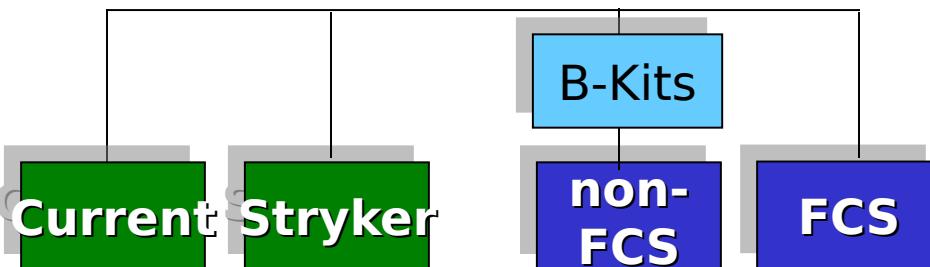
Sustainment Interoperability for the
OF

CLOE SIL*

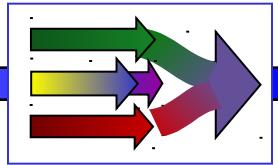


FORCE
Generations COE

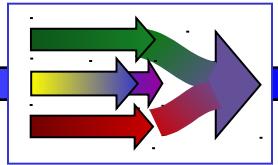
UA



*Systems Integration Laboratory

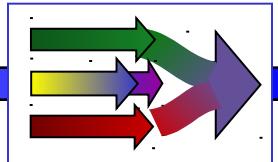


CLOE and Aviation



Synchronization Challenge

- **DAL**
- **DMAD**
- **AMACS**
- **ELAS**
- **LIMSS-GAS**
- **JATDI**
- **Etc.**



DISCUSSION